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1631

PATENT

ATTORNEY DOCKET: SP01-290

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor: Fang Lai *et al.*

Serial No: 09/972,469

Filing Date: October 5, 2001

Title: Amplifying Expressed Sequences  
From Genomic DNA of High-Order  
Eukaryotic Organisms for DNA  
Arrays

Group Art Unit: 1631

Examiner: Ms. Carolyn Smith

**RESPONSE**

Assistant Commissioner for Patents  
Washington, DC 20231

**RESPONSE TO THE EXAMINER'S OFFICE ACTION**

In reply to the Office Action dated September 22, 2003, and the Office communication dated November 12, 2003, in the above-captioned application, please enter the following amendments and Remarks as follows:

In the Claims

Please rewrite claims 1, as follows:

1. (Currently amended) A method for amplifying expressed genetic sequences from gDNA selected from a ~~mammalian or higher~~ higher-order plant eukaryotic species, for printing on DNA microarrays, the method comprises:

identifying either 1) a 3'UTR of a gDNA sequence based on the presence of a stop codon and a polyadenylation signal in the gDNA sequence corresponding to an expressed mRNA sequence, or 2) an exon of a gene defined by computer software;

selecting a predetermined gDNA sequence within the 3'UTR or exon;

designing a probe for said predetermined gDNA sequence;

performing a first polymerase chain reaction (PCR) for the 3'UTR or exon on gDNA to generate PCR-product;

separating the resultant PCR-product by a size-differentiation process selected from the group consisting of electrophoresis and chromatography;

selecting a predetermined band from the size-differentiated samples; and

performing a second polymerase chain reaction to amplify predetermined sequence.